

Sargent & Lundy^{LLC}

Randall L. Kurtz

Senior Manager
(312) 269-6562
(312) 269-1966 (FAX)
randall.l.kurtz@slchicago.infonet.com

May 7, 2001
Project No. 00037-000
File No. P-3

Proposed Revision to Sargent & Lundy (S&L)
Topical Report SL-TR-1A
Quality Assurance (QA) Program

United States Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555
Attention: Mr. T. R. Quay, Mail Stop O6F2

Gentlemen:

Enclosed for your review are two copies of a draft of the proposed Revision 16 to our Topical Report SL-TR-1A, S&L Nuclear QA Program. This revision changes the scope of the QA Program by adding operating gaseous diffusion plants per 10 CFR 76, reflects some organizational changes, and adds provisions for electronic signatures.

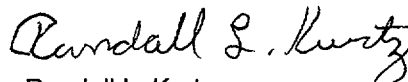
The attachment to this letter contains the reasons for the changes in Revision 16, and gives the bases for concluding that the changes continue to satisfy 10 CFR 50, 10 CFR 71, 10 CFR 72, and NUREG-0800. In accordance with the guidance given in 10 CFR 50.54(a), the attachment does not discuss changes that correct spelling, punctuation or editorial items.

Your letter to me dated July 15, 1999, accepted Revision 14 to this Topical Report. Revision 15 of the Topical Report issued August 6, 1999, is also attached. Revision 15 was not submitted to the NRC for prior approval since it did not contain reductions in commitments and dealt with organizational changes (see the bottom of page 00-8 of Revision 16 of the Topical Report, unchanged from Revision 14). The attachment to this letter discusses the Revision 15 changes also.

To facilitate your review of Revision 16, we have shown additions to the program by underlining the additions and have shown deletions by horizontal lines through the words deleted.

Please call me at (312) 269-6562 if you have any questions.

Very truly yours,



Randall L. Kurtz
Quality Assurance Manager

RLK:RPS:dkr

Copies:

Enclosure

T. R. Quay (NRC) (1/2)

P. L. Wattelet (1/0)

0005
1/1 Add: Ted. Quay
F-rids

ATTACHMENT

May 7, 2001

Project No. 00037-000

File No. P-3

Page 1 of 2

Revision 15

1. (Section 01.01) The former Diversified Business Group and Management Consulting Group have been replaced. The only part of the Diversified Business Group that performed work under this program was Operations & Maintenance Services (OMS). OMS is now part of the Plant Support Services Department, which in turn is part of the Engineering Functional Support Group (see page 01-2 of Revision 16 of this program). The Consulting Group, which superceded the Management Consulting Group, performs work outside the scope of this program, such as due diligence studies.

The only business group, other than Nuclear Power Technologies, currently performing work within the scope of this program is International Power, which provides support from the Chicago office to nuclear power plants under construction in North Korea, plants operating in South Korea, and other non-domestic nuclear plants.

The QA Division continues to report directly to the Chief Executive officer and thus has the requisite authority and organizational freedom.

There are no requirements in Appendix B of 10 CFR 50, Subpart H of 10 CFR 71, Subpart G of 10 CFR 72, or NUREG-0800 about the organization of the various engineering groups.

Revision 16

1. (Sections 00.00 and 18.02) The scope of this program is expanded to include support of operating gaseous diffusion plants. The United States Enrichment Corporation has accepted Revision 15 of this program and determined that it met the relevant parts of their QA Program per 10 CFR 76.93.
2. (Sections 00.00 and 17.08) Provisions have been added for the use of electronic signatures. A commitment is made to, and details are provided for, the use of the guidance in Regulatory Issue Summary (RIS) 2000-18, "Guidance on Managing Quality Assurance Records in Electronic Media" for electronic signatures.

We acknowledge that the NRC requested to be notified when the guidance in RIS 2000-18 is implemented. Please note that commitments and requirements pertaining to record keeping and maintenance of QA records, other than the use of electronic signatures, has not changed from previous submittals.

3. (Section 01.01) The Engineering, Technical Support Staff, and Material Management Departments of the Engineering Functional Support Group have been replaced by the Project Services and Plant Support Services Departments. The responsibilities of the former three departments have been transferred to the new two departments with the additional responsibilities of OMS.

There are no requirements in Appendix B of 10 CFR 50, Subpart H of 10 CFR 71, Subpart G of 10 CFR 72, or NUREG-0800 about the organization of the various engineering groups. This is not a reduction in commitments.

SARGENT & LUNDY LLC
NUCLEAR QUALITY ASSURANCE PROGRAM
TOPICAL REPORT
SL-TR-1A

APPROVED
BY:

R. L. KURTZ
QUALITY ASSURANCE MANAGER

P. L. WATTELET
CHIEF EXECUTIVE OFFICER

REVISION 1516

DATE: 08-06-1999

1 00.00 INTRODUCTION

2 This Sargent & Lundy LLC (S&L) Nuclear Quality Assurance
3 Program was established by management policy. It is intended
4 to be used primarily to assure the quality of modifications
5 and design analyses for operating nuclear plants and gaseous
6 diffusion plants, and of the design and construction of
7 radioactive material packaging, and of independent spent
8 fuel storage installations (ISFSIs). It is, however,
9 written to also assure the quality of design analyses and
10 modifications for nuclear plants that are under construction
11 or are being decommissioned. The program is employed where
12 the structures, systems and/or components are classified as
13 important to safety insofar as they prevent or mitigate the
14 consequences of postulated accidents that could cause undue
15 risk to the health and safety of the public. Safety-related
16 structures, systems and components of nuclear power plants
17 controlled by this Quality Assurance Program are identified
18 in the Safety Analysis Report (usually Section 3.2) and in
19 more detailed lists developed in response to NRC Generic
20 Letter 83-28. Quality assurance commitments for other types
21 of important to safety items, as found in licensees' or U.S.
22 Department of Energy contractors' quality assurance programs
23 and other licensing basis documents, are specified to S&L in
24 contract documents. Project instructions or project work
25 plans shall delineate the applicability of this program to
26 these other types of items.

27 The applicable criteria in this program shall be applied in
28 a graded approach to radioactive material packaging and
29 ISFSIs. The application shall be to an extent that is
30 commensurate with the importance to safety, such as

1 commensurate with the importance to safety, such as
2 described in Appendix A of Regulatory Guide 7.10 (see item s
3 in this chapter), or its equivalent for ISFSIs, such as the
4 classification system described in NUREG/CR-6407 titled
5 "Classification of Transportation Packaging and Dry Spent
6 Fuel Storage System Components According to Importance to
7 Safety."

8 *The applicable criteria in this program shall be applied in*
9 *a graded approach to operating gaseous diffusion plants to*
10 *an extent that is commensurate with the importance to safety*
11 *and is consistent with the quality assurance program*
12 *implemented by the United States Enrichment Corporation*
13 *(USEC), or its successor, in accordance with 10 CFR 76.93.*

14 To implement the program, standard operating procedures have
15 been prepared. Revisions to the Nuclear Quality Assurance
16 Program and the standard operating procedures will be made,
17 in accordance with a standard operating procedure, for any
18 of the following reasons:

- 19 a. the program or standard operating procedures may be
20 incomplete, unclear or incorrect;
- 21 b. the resolution of a nonconformance may require change to
22 some portion of the program or standard operating
23 procedures;
- 24 c. the personnel implementing or auditing the program or
25 standard operating procedures determine that the program
26 and/or procedures do not effectively control a work
27 function;

d. the standards, codes, regulatory requirements, or organization may be changed.

S&L policy makes compliance with the S&L Nuclear Quality Assurance Program and implementing procedures mandatory for all personnel performing activities relating to safety.

For limited scope projects, such as modification work for operating plants, implementation of various elements of this Nuclear Quality Assurance Program will depend on S&L's assigned responsibilities on the project.

The S&L Nuclear Quality Assurance Program, as represented herein, complies with Title 10 of the Code of Federal Regulations, Part 50, Appendix B, titled "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants." S&L is committed to meeting and implementing the applicable provisions of the following requirements except as indicated below and/or as these provisions may be modified by a commitment in an applicable SAR:

a. ANSI/ANS-3.1 - 1987 - Selection, Qualification and Training of Personnel for Nuclear Power Plants. For qualifications of the Quality Assurance Manager, S&L is committed to ANSI/ANS-3.1 - 1978.

b. Regulatory Guide 1.26, February, 1976 - Quality Group Classification and Standards for Water-, Steam-, and Radioactive-Waste-Containing Components of Nuclear Power Plants.

1 For certain activities, S&L takes exception to
2 Regulatory Position C.3.b(1) regarding external audits.
3 Refer to position in Section 07.03.

4 m. Regulatory Guide 1.146, August 1980 - Qualification of
5 Quality Assurance Program Audit Personnel for Nuclear
6 Power Plants; (ANSI/ASME N45.2.23 - Qualification of
7 Quality Assurance Program Audit Personnel for Nuclear
8 Power Plants).

9 n. ANSI/ASME N45.2.5-1978 - Supplementary Quality Assurance
10 Requirements for Installation, Inspection, and Testing
11 of Structural Concrete, Structural Steel, Soils and
12 Foundations During the Construction Phase of Nuclear
13 Power Plants.

14 o. IEEE Standard 336-1977 - IEEE Standard Installation,
15 Inspection, and Testing Requirements for Instrumentation
16 and Electric Equipment During the Construction of
17 Nuclear Power Generating Stations.

18 p. NRC Letter to All Licensees of Operating Reactors and
19 Holders of Construction Permits, "Plant Record Storage
20 on Optical Disks (Generic Letter 88-18)", October 20,
21 1988.

22 q. *NRC Regulatory Issue Summary 2000-18, Guidance on*
23 *Managing Quality Assurance Records in Electronic Media,"*
24 *October 23, 2000. S&L uses the guidance in this summary*
25 *for authentication of electronic records, i.e., the*
26 *guidance in Nuclear Information and Records Management*
27 *Association, Inc. (NIRMA) Technical Guide 11-1998,*

"Authentication of Records and Media." See Chapter 17.00 for further details.

- r. NRC Letter to All Holders of Operating Licensees and Construction Permits for Nuclear Power Reactors, "Actions to Improve the Detection of Counterfeit and Fraudulently Marketed Products (Generic Letter 89-02), March 21, 1989.
- s. NRC Letter to All Holders of Operating Licenses and Construction Permits for Nuclear Power Reactors, "Licensee Commercial-Grade Procurement and Dedication Programs (Generic Letter 91-05), April 9, 1991.
- t. Regulatory Guide 7.10, June 1986 - Establishing Quality Assurance Programs for Packaging Used in the Transport of Radioactive Material.

The Topical Report is reviewed annually for continuing conformance to regulatory requirements and industry codes and standards. Changes in the Topical Report are submitted to the Nuclear Regulatory Commission in accordance with 10 CFR 50.4 (b)(7)(ii). Any reductions in commitments to the NRC contained in this Topical Report must be accepted by the NRC before implementation. Changes to this Topical Report that do not reduce commitments may be implemented prior to NRC review. The examples given in 10 CFR 50.54 (a)(3) of changes in licensees' QA program descriptions, that do not require prior NRC approval, are also applicable to this Topical Report. Those changes, that do not require prior NRC approval, must be submitted to the NRC at intervals of no greater than two years.

Administration. Although the individual groups are distinct entities, the management and execution of their respective functions and responsibilities may involve staff sharing with other groups.

The Director of the Nuclear Power Technologies business group oversees nuclear services provided for operating and decommissioning plants and other specialized projects.

In a similar fashion, the Directors of the other business groups oversee services provided within their areas of responsibilities.

The Director of Engineering exercises administrative control over the *Project Services and Plant Support Services Engineering, Technical Support Staff, and Material Management* Departments.

The Director of Finance & Administration exercises administrative control over the Managers of the Administrative Services, Facilities & Operations, and Human Resources Divisions. The Facilities & Operations Division is responsible for the configuration control of computer software used in production, including the review and filing of software verification and validation documentation.

The Quality Assurance Manager reports to the Chief Executive Officer.

Personnel from the Director of Engineering's staff and the appropriate support services divisions in the Finance & Administration Group normally report to the Directors of these two functional support groups. However, some

activities affecting quality. Training ensures that personnel will achieve proficiency in those parts of the quality assurance program and procedures pertinent to their activities before assuming responsibility for those activities. This training is accomplished in accordance with a standard operating procedure.

Training in appropriate S&L administrative and technical standards and procedures is provided, as applicable, for personnel performing quality-related tasks. The responsible managers establish the training scope and designate who is to be trained.

A ~~quality assurance~~ standard operating procedure provides for training of project personnel in project instructions controlling quality-related activities.

Training activities are documented. Identification of personnel receiving training and of the standards, procedures, and project instructions in which they were trained is documented.

02.07 Differences of opinion between Quality Assurance and other S&L organizations are resolved by the Chief Executive Officer. Resolution is documented.

- b. identifying individuals or organizations responsible for preparing, reviewing, approving, and issuing documents and revisions thereto;
- c. identifying and maintaining current the proper documents and their status, e.g., "preliminary," "approved for construction," "approved for bids," etc., as appropriate;
- d. coordinating and controlling interface documents;
- e. assuring availability of documents at the onset of work for which they are needed;
- f. establishing current and updated document distribution lists *for hardcopy distributions*;
- g. obsoleting, recalling, or in some manner identifying documents not intended for current use.

Changes to documents are reviewed and approved with a degree of control commensurate with the original document, by the same organizations that performed the original review and approval unless other qualified organizations are specifically designated by S&L management. However, nontechnical editorial changes to design documents may not require that the revised document receive the same review and approval as the original document. In such cases, these types of changes and the person who can authorize such a decision are delineated in the procedure controlling issuance of the document. Reviewers have access to pertinent background information upon which to base the

documentation thereof, monitoring of control and calibration of measuring equipment, surveillance of heat treating processes, and observation of packing and shipping activities. As requested by the client, or as determined by S&L, supplier surveillances may include review of pertinent supplier documentation during fabrication, shipping and final inspection, review of documentation to be shipped to a plant or construction site, and review of completed project checklists and release tags prior to release of equipment for shipping.

The intervals and depth of the surveillances are determined by client or S&L requirements, but are consistent with the relative importance, complexity, and quantity, and the frequency of procurement of the item or service being furnished.

07.03 Audits of suppliers are conducted, per Section 18.00 and implementing procedures at maximum three-year intervals, except as stipulated below, to assure compliance with quality requirements. Supplier audits include auditing of suppliers' certificates of conformance when these certificates are used as a basis for accepting the item or service.

Audits of suppliers, after award of a contract, and annual evaluations of suppliers are not necessary for procurement actions when the items or related services are all of the following:

- a. relatively simple and standard in design, manufacture and test, and

activity. If any portion of the written procedures or instructions is superceded, S&L or its suppliers shall retain the superceded material for 3 years after it is superceded.

17.07 Records associated with ISFSIs must include the following: design records, records of use and the results of reviews, inspections, tests, audits, monitoring of work performance, and material analysis.

Records pertaining to the design fabrication, erection, testing, maintenance, and use of ISFSI structures, systems, and components important to safety shall be maintained under the control of, and as directed by, the licensee until the NRC terminates the ISFSI license.

17.08 *Electronic records may be authenticated in accordance with the guidance given in NIRMA Technical Guide 11. This authentication shall be made in one of three ways: a hardcopy authorization from the authentication authority to add the authority's electronic signature to the document; an electronic signature controlled by a user ID/password combination; or a digital signature.*

When authentication authority is transferred to a designee, measures are identified and documented to ensure that only those designees properly authorized do authenticate records/media. These measures include a counter (secondary) signature.

System administrator(s) assign passwords to be used for electronic signatures.

c. to determine the degree of compliance on each project with project instructions, standards, procedures and other applicable documents, such as codes and national standards which provide guidance for the project;

d. to assess the effectiveness of this program and its implementing procedures.

Audits and surveillances are conducted by S&L personnel who have no direct responsibility in the areas they audit and review. Auditors are required to possess the educational, training, and experience qualifications for auditing and surveillance as specified in implementing procedures.

The Nuclear Quality Assurance Program requires that the work of support divisions and nuclear project teams be audited on applicable elements of this program, implementing quality assurance procedures, project instructions, standards and procedures on the basis of the safety importance of the activity being performed, but at least biennially for nuclear projects or *projects supporting gaseous diffusion plants* which are in the operating or decommissioning phase, and annually or once during the life of the activity, whichever is shorter, for projects in the construction phase. Projects supporting radioactive material packaging or ISFSIs are audited at least annually. An audit schedule is prepared each year identifying the audits to be performed and their scheduled dates. Scheduling is dynamic and resources are supplemented when QA program effectiveness is in doubt. Surveillances led by qualified lead auditors may be substituted for portions or all of an audit, if a lead auditor evaluates the surveillance(s) as examining the same

SARGENT & LUNDY LLC
NUCLEAR QUALITY ASSURANCE PROGRAM
TOPICAL REPORT
SL-TR-1A

APPROVED
BY:

R. L. KURTZ
QUALITY ASSURANCE MANAGER

P. L. WATTELET
CHIEF EXECUTIVE OFFICER

REVISION 1415

DATE: 08-06-1999

1 01.00 ORGANIZATION

2 01.01 S&L organizational structure and functional responsibility
3 assignments are based on the recognition of quality
4 assurance as an inter-disciplinary process with quality-
5 related activities being performed by individuals at all
6 levels. The responsibilities of persons implementing
7 quality-related requirements are established, assigned, and
8 documented. Assignments are such that:

9 a. attainment of quality objectives is accomplished by
10 individuals assigned responsibility for specifying
11 quality or performing work to quality assurance
12 procedures;

13 b. verification of conformance to established quality
14 requirements is accomplished by project personnel who
15 are independent of those responsible for establishing
16 or performing the activity;

17 c. personnel performing key quality assurance functions
18 have direct access to management.

19 S&L's management organizational structure is shown in
20 Figure 01.01-1, Sargent & Lundy Management Organization
21 Chart. Company services are organized into three business
22 groups and two functional support groups. The business
23 groups are Nuclear Power Technologies Diversified
24 ~~Businesses and Management Consulting~~ and other business
25 groups as determined by the Chief Executive Officer. The
26 functional support groups are Engineering and Finance &
27 Administration. ~~Each group is managed by a Director who~~

1 ~~reports to~~ The Chief Executive Officer exercises
2 administrative control over the Directors of business
3 groups, as well as the Director of Engineering and the
4 Director of Finance & Administration. Although the
5 individual groups are distinct entities, the management and
6 execution of their respective functions and
7 responsibilities may involve staff sharing with other
8 groups.

9 The Director of the Nuclear Power Technologies business
10 group oversees nuclear services provided for operating and
11 decommissioning plants and other specialized projects.

12 ~~The Director of Diversified Businesses exercises~~
13 ~~administrative control over personnel and management~~
14 ~~resources providing information technology services,~~
15 ~~transmission and distribution services, and operations &~~
16 ~~maintenance services.~~

17 ~~The Director of Management Consulting oversees management~~
18 ~~consulting engagements that provide domestic government and~~
19 ~~industry association services. In a similar fashion, the~~
20 ~~Directors of the other business groups oversee services~~
21 ~~provided within their areas of responsibilities.~~

22 The Director of Engineering exercises administrative
23 control over the Engineering, Technical Support Staff, and
24 Material Management Departments.

25 The Director of Finance & Administration exercises
26 administrative control over the Managers of the
27 Administrative Services, Facilities & Operations, and Human

1 Resources Divisions. *The Facilities & Operations Division*
2 *is responsible for the configuration control of computer*
3 *software used in production, including the review and*
4 *filing of software verification and validation*
5 *documentation.*

6 The Quality Assurance Manager reports to the Chief
7 Executive Officer.

8 Personnel from the Director of Engineering's staff and the
9 appropriate support services divisions in the Finance &
10 Administration Group normally report to the Directors of
11 these two functional support groups. However, some
12 personnel from these two groups may be temporarily assigned
13 to projects controlled by ~~the Nuclear Power Technologies~~
14 ~~and Diversified Businesses Groups~~ *a Director of a business*
15 *group*, as required, to perform the necessary technical and
16 administrative functions pertaining to design engineering,
17 procurement, and inspection. The Director of Engineering
18 is responsible for establishing processes, methods and
19 techniques for achieving technical objectives. ~~The Nuclear~~
20 ~~Power Technologies~~ *Director of a business group* has overall
21 responsibility for the technical adequacy and acceptability
22 of S&L nuclear design work *within the responsibility of the*
23 *group* and for providing feedback to the Director of
24 Engineering on the effectiveness of the engineering
25 processes, methods and techniques.

26 Project Instructions and governing company standards are
27 established to control quality-related activities. These
28 instructions and company standards are reviewed by Quality

1 Assurance for conformance to this program's requirements
2 before issuance.

3 *Within a business group, a project organization is*
4 *established for each project in which S&L has essentially*
5 *all the engineering responsibility and for services*
6 *projects (or tasks) for units under construction, in*
7 *operation or in decommissioning which may have been*
8 *engineered by others. The size and composition of the*
9 *project organization is dependent on the project*
10 *responsibilities as delineated by the project scope of*
11 *work. Since S&L serves a wide variety of clients with*
12 *different service requirements, different project*
13 *organizations may be established to best accommodate the*
14 *scope of work.*

15 For each project, the project organization is comprised of
16 qualified individuals. In cases where an onsite design
17 engineering and/or services project organization is
18 required and falls under the cognizance of the QA Program,
19 organizational charts, functional descriptions of
20 responsibilities and relationships, job descriptions of key
21 personnel positions, or equivalent forms of documentation
22 are prepared showing the lines of responsibility.
23 Delegation of authority passes from the responsible
24 *Director of a business group* ~~Director~~ and Project Director
25 through the Project Manager to Senior Project Engineers and
26 responsible engineers *and consultants.*

27 The responsibility for implementation of the S&L Quality
28 Assurance Program on a project is assigned to the Project
29 Manager. The project team provides the S&L interface with

1 the client and major contractors, and establishes the
2 technical requirements on the project to assure compliance
3 with applicable codes, standards and regulations. In
4 project matters, the Senior Project Engineers report to the
5 Project Manager, who reports to the Project Director, who
6 represents S&L management on the project.

7 Interfacing relationships and lines of communication among
8 S&L, the client, vendors, and major contractors on a
9 project are established by and/or described in documents
10 such as, but not limited to, the scope of work, the project
11 work plan, procurement documents, and project instructions.
12 Internal interfaces within S&L are established in company
13 standards and procedures, project instructions, and quality
14 assurance procedures.

15 The Chief Executive Officer establishes quality assurance
16 policy and objectives. The Chief Executive Officer has
17 delegated to the Quality Assurance Manager responsibility
18 for providing and maintaining the Quality Assurance
19 Program, for providing programmatic policy and direction on
20 quality assurance, and for coordinating and verifying its
21 implementation on projects.

01.02 Quality Assurance, as indicated in Figure 01.01-1, S&L Management Organization Chart, is independent of any S&L project organization. The Quality Assurance Manager has the authority and organizational freedom to identify quality problems within S&L, recommend or provide solutions and verify their implementation, and to stop unsatisfactory work or otherwise control further processing of a nonconforming item until the proper disposition of the unsatisfactory condition has been achieved. S&L personnel are required to bring to the attention of the Quality Assurance Manager conditions which may merit stop-work consideration. The Quality Assurance Manager provides expertise as applicable in interpretation of quality assurance requirements in codes and standards, in regulations, in NRC Regulatory Guides and in the Quality Assurance Articles, Section III, Nuclear Power Plant Components, ASME Boiler and Pressure Vessel Code.

The responsibilities and functions of the Quality Assurance Manager include, but are not limited to:

- a. developing for management approval by the Chief Executive Officer standard operating procedures necessary for implementation of the program;
- b. recommending to the Chief Executive Officer desirable changes in the Nuclear Quality Assurance Program;
- c. reviewing procedure, administrative standards and instructions prepared by groups, departments, divisions, and project organizations for conformance to

1 the Nuclear Quality Assurance Program and procedure
2 requirements;

3 d. interfacing with clients and the Nuclear Regulatory
4 Commission on audits and quality assurance matters;

5 e. interfacing with project organizations and support
6 divisions to assist in the implementation of quality
7 assurance requirements on a project;

8 f. maintaining and controlling the distribution of the
9 Nuclear Quality Assurance Manual and revisions thereto;

10 g. training and instructing S&L personnel performing
11 quality-related activities in the implementation of the
12 Nuclear Quality Assurance Program and standard
13 operating procedures;

14 h. developing and conducting audits and surveillance on
15 design, procurement and other activities of S&L
16 personnel assigned to the home office and to the field;

17 i. providing quality assurance input in S&L procurement
18 documents;

19 j. reviewing, evaluating and reporting on S&L suppliers'
20 quality assurance programs and/or procedures;

21 k. certain types of inspection as specified in Section
22 10.00 of the Program and in implementing procedures;

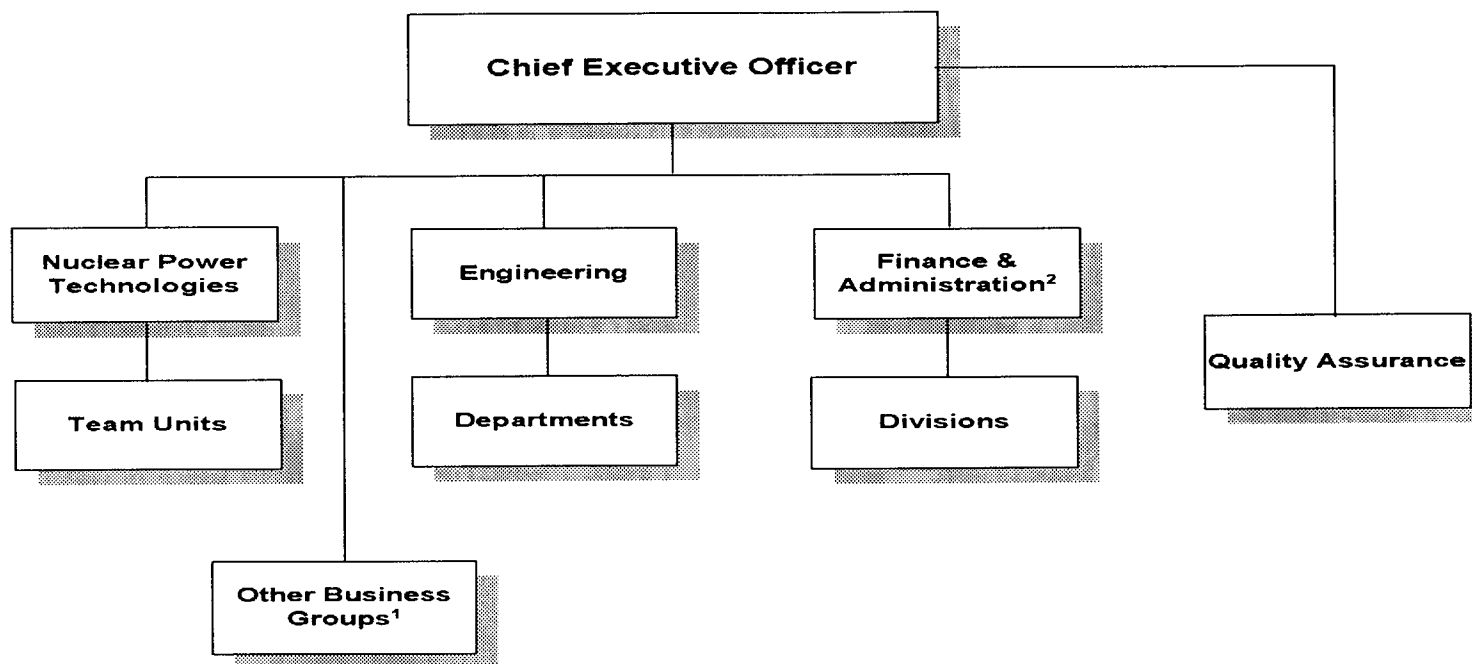
23 l. audit and surveillance of suppliers' compliance to
24 their approved quality assurance programs;

1 m. providing direct quality assurance services as
2 requested by clients, including such services as
3 preparation of QA programs and procedures, auditing and
4 surveillance of the client's organization and its
5 suppliers, and training of client personnel in quality
6 assurance activities;

7 n. furnishing qualified personnel to clients for
8 assistance in quality-related activities.

9 When responsible for procurement, S&L delegates, or a
10 client may delegate to the Quality Assurance Manager,
11 authority to identify supplier quality control problems and
12 to stop unsatisfactory work or otherwise control further
13 processing of an item by a supplier.

Sargent & Lundy Management Organization Chart
Figure 01.01-1



¹Other Business Groups and their area of responsibility are determined by the Chief Executive Officer.

²Configuration control of computer software used in production, including review and filing of software verification and validation documents, is the responsibility of the Finance & Administration functional support group.